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6 **IN THE UNITED STATES DISTRICT COURT**  
7 **FOR THE DISTRICT OF ARIZONA**  
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9 United States of America,  
10 Plaintiff,  
11 v.  
12 Gear Box Z Incorporated,  
13 Defendant.  
14

No. CV-20-08003-PCT-JJT

**ORDER**

15 At issue is Plaintiff United States of America's Motion for Preliminary Injunction  
16 (Doc. 37, Mot.), to which Defendant Gear Box Z Inc. filed a Response (Doc. 42, Resp.),  
17 the United States filed a Reply (Doc. 46, Reply), Defendant filed a Sur-Reply (Doc. 55,  
18 Sur-Reply) with leave of Court, and the United States filed a Reply to Sur-Reply (Doc. 61,  
19 Reply to Sur-Reply) with leave of Court. The Court held a hearing on the Motion on  
20 February 17, 2021. (Doc. 88; Doc. 95, Transcript ("Tr.")). At the hearing, the Court granted  
21 leave for non-party Specialty Equipment Market Association ("SEMA") to file an Amicus  
22 Curiae brief (Doc. 89-1, Amicus Br.), and responses with leave of Court were filed by  
23 Defendant (Doc. 103, Def.'s Resp. to Amicus Br.) and the United States (Doc. 105, U.S.  
24 Resp. to Amicus Br.).

25 **I. BACKGROUND**

26 Defendant Gear Box Z, Inc., an Arizona corporation, manufactures and sells  
27 aftermarket products for the modification of diesel engines on motor vehicles including  
28 Ford, General Motors, and Dodge trucks. In April 2017, the United States Environmental

1 Protection Agency (“EPA”) notified Defendant that it was under investigation for selling  
2 products that, when installed, circumvent or delete an engine’s emissions controls,  
3 violating the Clean Air Act (“CAA”), 42 U.S.C. § 7522(a)(3)(B). After Defendant provided  
4 the requested information, the EPA sent a Notice of Violation (“NOV”) to Defendant in  
5 December 2017.

6 Defendant produces and sells both hardware and software products, and the EPA  
7 claims that virtually all of Defendant’s products are defeat devices—because they defeat  
8 emissions controls—and that each independently violates the CAA. (Doc. 37-4, Attach. A,  
9 Defeat Device Product List.) The hardware products the EPA claims are used to defeat  
10 emissions controls include block plates, which block emissions gas recirculation (“EGR”)  
11 flow to the engine; delete pipes, which replace the original equipment manufacturer’s  
12 (“OEM”) exhaust pipe; and diesel particulate filter (“DPF”) emulators, which simulate  
13 signals to the engine control module (“ECM”) that the DPF is functioning properly when  
14 it is not. Installation of this hardware requires new software, which Defendant also sells, to  
15 “tune” the vehicle so that it functions without emissions controls by modifying or  
16 overwriting the vehicle’s emissions calibrations that the OEM put in place for compliance  
17 with federal regulations and certification by the EPA. Defendant also produces and sells a  
18 kind of “tuner,” which is a handheld device preloaded with Defendant’s tunes. The tunes  
19 also function to mask the disabling of emissions controls by reprogramming the ECM so that  
20 the on-board diagnostics (“OBD”) do not detect, record, or notify the driver (or an  
21 inspector) of the disabling; as a result, no malfunction indicator light (“MIL”) will activate.

22 By circumventing or defeating emissions controls, a driver can obtain enhanced  
23 vehicle performance through greater power, torque, and/or fuel economy, because  
24 emissions controls consume engine power and fuel. On the flip side, excess emissions  
25 cause known harm to human health and the environment—an issue the Clean Air Act  
26 attempts to remedy.

1 Since receiving the NOVs, Defendant has continued to produce and sell its  
 2 products.<sup>1</sup> The parties failed to resolve the NOVs outside of court, and the United States  
 3 filed this lawsuit on January 3, 2020, and filed a Motion for Preliminary Injunction on  
 4 August 20, 2020.

## 5 **II. ANALYSIS**

6 In order to obtain a preliminary injunction, the United States must show that “(1)  
 7 [it] is likely to succeed on the merits, (2) [it] is likely to suffer irreparable harm in the  
 8 absence of preliminary relief, (3) the balance of equities tips in [its] favor, and (4) an  
 9 injunction is in the public interest.” *Garcia v. Google, Inc.*, 786 F.3d 733, 740 (9th Cir.  
 10 2015) (citing *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 9 (2008)). The Ninth  
 11 Circuit Court of Appeals, employing a sliding scale analysis, has also stated that simply  
 12 “serious questions going to the merits” but “a hardship balance that tips sharply toward the  
 13 plaintiff can support issuance of an injunction, assuming the other two elements of the  
 14 *Winter* test are also met.” *Drakes Bay Oyster Co. v. Jewell*, 747 F.3d 1073, 1078 (9th Cir.  
 15 2013) *cert. denied*, 134 S. Ct. 2877 (2014) (quoting *Alliance for the Wild Rockies v.*  
 16 *Cottrell*, 632 F.3d 1127, 1132 (9th Cir. 2011)) (internal quotations omitted).

### 17 **A. Likelihood of Success on the Merits**

18 Under the relevant portion of the CAA, it is prohibited

19 for any person to manufacture or sell, or offer to sell, or install, any part or  
 20 component intended for use with, or as part of, any motor vehicle or motor  
 21 vehicle engine, where a principal effect of the part or component is to bypass,  
 22 defeat, or render inoperative any device or element of design installed on or  
 23 in a motor vehicle or motor vehicle engine in compliance with regulations  
 24 under this subchapter, and where the person knows or should know that such  
 part or component is being offered for sale or installed for such use or put to  
 such use.

25 42 U.S.C. § 7522(a)(3)(B).

26 In its Motion and supporting papers, the United States provides extensive evidence  
 27 as to the functionality of Defendant’s products and their capability to act as defeat devices,

28 <sup>1</sup> As an indication of sales volume, in a 28-month reporting period from 2015 to 2017,  
 Defendant sold 8,323 products that the EPA considers to be defeat devices.

1 and Defendant does not explicitly address or refute that evidence. Instead, Defendant  
 2 argues it is not in violation of the CAA because its products fall under certain of the CAA's  
 3 exceptions, including the "maintenance exception" and exceptions or exclusions for use on  
 4 motor sports, military, and emergency vehicles. (Resp. at 2–3; Sur-Reply at 1–3.)  
 5 Defendant also contends the United States cannot demonstrate the knowledge component  
 6 of the CAA's prohibition. (Resp. at 13.) The Court examines these arguments in turn.

### 7 **1. Maintenance Exception**

8 The so-called maintenance exception provides as follows:

9 No action with respect to any device or element of design referred to in  
 10 [§ 7522(a)(3)] shall be treated as a prohibited act under that paragraph if (i)  
 11 that action is for the purpose of repair or replacement of the device or  
 12 element, or is a necessary and temporary procedure to repair or replace any  
 13 other item and the device or element is replaced upon completion of the  
 procedure, and (ii) such action thereafter results in the proper functioning of  
 the device or element referred to in [§ 7522(a)(3)].

14 42 U.S.C. § 7522(a)(5).

15 Defendant contends that its hardware and software products can be used for the  
 16 repair of a motor vehicle and can be removed or reversed, and thus, under the maintenance  
 17 exception, the products are not prohibited by the CAA. (Resp. at 5–16.) In response, the  
 18 United States argues that Defendant's products are not designed for "necessary and  
 19 temporary" repair procedures; the products are not designed such that their installation is  
 20 to be reversed; and even if use of the products is reversible, the statute requires that the  
 21 changes made using the products are actually reversed, resulting "in the proper  
 22 functioning" of the original emissions controls, which changes using Defendant's products  
 23 are not. (Reply at 5–9.)

24 Although the United States has the burden to show a likelihood of success on the  
 25 merits to obtain the requested injunctive relief, the burden of proof applicable to an  
 26 exception to a CAA prohibition lies with Defendant. *See United States v. First City Nat'l*  
 27 *Bank of Houston*, 386 U.S. 361, 366 (1967) (stating the general rule that the burden falls  
 28 to the party that "claims the benefits of an exception to the prohibition of a statute" (citing

1 *F.T.C. v. Morton Salt Co.*, 344 U.S. 37, 44–45 (1948)); *E.E.O.C. v. Kamehameha*  
 2 *Sch./Bishop Estate*, 990 F.2d 458, 460 (9th Cir. 1993). That is, the United States has the  
 3 burden to show Defendant’s products fall within the CAA’s prohibitions; Defendant has  
 4 the burden to show the maintenance (or another) exception to the prohibitions applies to  
 5 its products.

6 Other than its own conclusory statements, Defendant has pointed to no evidence  
 7 that, under the statutory exception, its products were designed “for the purpose of repair or  
 8 replacement” of a device or element in compliance with the CAA regulations, or for “a  
 9 necessary and temporary procedure to repair or replace any other item.” This failure of  
 10 evidence alone is fatal to Defendant’s claim that it can demonstrate that the maintenance  
 11 exception applies to its products.

12 Defendant’s principal contention is that installation of its products can be  
 13 reversed—an attribute Defendant argues theoretically brings use of the products within the  
 14 exception—and that Defendant does not know what its customers ultimately do with its  
 15 products. The Court agrees with the United States (Reply at 5) that the exception requires  
 16 not only reversibility, but that the CAA-compliant device or element—which Defendant’s  
 17 products modified—“*is replaced*” upon completion of any maintenance procedure  
 18 resulting “in the proper functioning of the device or element” under the CAA. Put another  
 19 way, it is not sufficient that installation of Defendant’s products can be reversed; the  
 20 installation must actually be reversed. This is logical, considering the purpose of the CAA  
 21 and its implementing regulations in this context is to reduce harmful emissions. The plain  
 22 language of the exception makes it clear that it is not intended as a long-term loophole.  
 23 Defendant has proffered no evidence that any installation of its products has been reversed.

24 The United States has produced evidence that the design of certain of Defendant’s  
 25 products indicates that their installation is not intended to be reversed. For example,  
 26 through an examination of the source code, it is evident that Defendant did not design its  
 27 software to reverse the changes it makes and return the vehicle back to the EPA-certified  
 28 condition. (Doc. 37-2, Jones Decl. ¶¶ 88–89.) Likewise, the United States has produced

evidence that Defendant's contention that it designed its parts for maintenance purposes is not credible. Specifically, existing OEM diagnostic tools are sufficient for a technician to diagnose and fix problems with a vehicle without the need for third-party tuners such as Defendant's (Jones Decl. ¶¶ 71–72), and common diagnostic trouble code readers—to which Defendant equates its tuners—cost \$20, as opposed to the average cost of Defendant's tuners of \$400.

What sales and customer evidence there is indicates that the purpose of Defendant's product line is not for short-term maintenance.<sup>2</sup> For example, Defendant's responses to customer requests about what Defendant's product line can do have included statements such as, "Not only will you see an increase in mileage, but it will give you around 70 more [horsepower] which is really handy for towing." (Tr. at 19; Pl.'s Ex. 24.) And, "On average we are seeing a 20% increase in fuel mileage and power, but each truck is different." (Pl.'s Ex. 31.) No customer evidence before the Court indicates customers have actually used Defendants' products for maintenance and repair. For all these reasons, Defendant has not shown the maintenance exception applies to its products.

## **2. Other Exceptions or Exclusions**

Defendant also argues that other exceptions, or exclusions, exist in the CAA to cover uses for its products, including an exclusion for the use of defeat devices in motor sports or competition vehicles as well as exceptions for emergency and military vehicles. Much ink has been spilled already in this case regarding whether a motor sports exception, or exclusion, exists in the CAA and if so, what its limits are. (Docs. 55, 61, 89-1, 103, 105.) Indeed, the Amicus Curiae brief and its responses examine this question in great detail. But Defendant has not produced a single piece of evidence that a single one of its products has been used on a motor sports vehicle (or an emergency or military vehicle, for that matter). By contrast, the United States has produced ample evidence, as was its burden, that Defendant's products are used in motor vehicles as contemplated by the CAA. (*See, e.g.*, U.S. Resp. to Amicus Br. at 5–9.) Any examination of the question whether a motor sports

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<sup>2</sup> Defendant has consistently claimed it has not kept records of who it sold its products to or for what purpose customers use its products.

1 exception or exclusion exists and is applicable here would be entirely hypothetical at this  
 2 point. Without any evidence that there is a motor sports use for Defendant’s products, the  
 3 motor sports exclusion issue is moot.

### 4 **3. Knowledge**

5 Defendant also suggests that the United States cannot show that Defendant “knows  
 6 or should know” that its products are “being offered for sale or installed” as defeat devices,  
 7 as required by the CAA, 42 U.S.C. § 7522(a)(3)(B), because Defendant does not know  
 8 what its customers do with its products. (*E.g.*, Resp. at 13.) As the Court alluded to above,  
 9 Defendant’s suggestion is belied by its own statements in response to customer questions  
 10 on its website and on social media platforms. Defendant’s own product manuals and  
 11 advertisements also demonstrate that Defendant knows its products are installed as defeat  
 12 devices. (*E.g.*, Doc. 37-3, Jorquera Decl. ¶¶ 49–52.) Defendant cannot claim a lack of  
 13 knowledge simply by not keeping sales records, and the evidence clearly shows that  
 14 Defendant knows the purpose of its products is for use as defeat devices.

15 Considering all the evidence before the Court, the United States is likely to succeed  
 16 on the merits to show that Defendant is violating the CAA by manufacturing and selling  
 17 its products.

### 18 **B. Irreparable Harm**

19 In instances in which a federal agency such as the EPA brings an enforcement action  
 20 under a statute that authorizes injunctive relief, as the CAA does, the United States need  
 21 not further demonstrate irreparable harm in seeking a preliminary injunction. *See F.T.C. v.*  
 22 *Consumer Def., LLC*, 926 F.3d 1208, 1213 (9th Cir. 2019). In any event, the irreparable  
 23 harm at issue here is obvious. Emissions of harmful pollutants damage human health and  
 24 the environment—a proposition Defendant concedes. Instead, Defendant argues that  
 25 because the United States waited two years from the time it sent NOV’s to Defendant to the  
 26 time it filed suit, somehow addressing the irreparable harm “can wait until the case is  
 27 decided on the merits at trial.” (Resp. at 18.) Defendant’s argument goes more to a  
 28 balancing of the equities than irreparable harm in this instance. Harm to human health and



1 the environment is what it is, and any delay in the United States’ enforcement of the  
 2 CAA—which here was only minimal—does not change the irreparable harm caused by  
 3 defeat devices. To the extent the United States must make an independent showing of the  
 4 irreparable harm caused by the manufacture, sale, and use of Defendant’s products, it has  
 5 done so amply.

### 6 **C. Balance of Equities and the Public Interest**

7 The United States also has the burden to show that the balance of equities tips in its  
 8 favor and that a preliminary injunction is in the public interest. *Winter*, 555 U.S. at 20. “A  
 9 preliminary injunction is an extraordinary remedy never awarded as of right.” *Id.* at 24  
 10 (citing *Munaf v. Green*, 553 U.S. 674, 689–90 (2008)). “In each case, courts ‘must balance  
 11 the competing claims of injury and must consider the effect on each party of the granting  
 12 or withholding of the requested relief,’” paying particular attention to the public  
 13 consequences. *Id.* (quoting *Amoco Prod. Co. v. Vill. of Gambell, Alaska*, 480 U.S. 531, 542  
 14 (1987)).

15 Here, the Court must essentially balance the irreparable harm identified above with  
 16 financial harm to Defendant. As the United States points out, “economic loss does not in  
 17 and of itself, constitute irreparable harm. Financial injury is only irreparable where no  
 18 adequate compensatory or other corrective relief will be available at a later date, in the  
 19 ordinary course of litigation.” (Mot. at 20 (citing *Mexichem Specialty Resins, Inc. v. E.P.A.*,  
 20 787 F.3d 544, 555 (D.C. Cir. 2015)).) Weighing the harm to human health and the  
 21 environment the United States seeks to prevent against potential financial loss to Defendant  
 22 if the sale of its products is enjoined, the balance tips in the United States’ favor in this  
 23 instance.

24 Likewise, Congress enacted the CAA to combat air pollution, which itself is a  
 25 declaration of public policy. The public interest in halting Defendant’s acts that likely  
 26 violate the CAA outweighs Defendant’s interest in continuing to operate a private business.



1 Having satisfactorily demonstrated all the *Winter* factors, the United States is entitled to a  
2 preliminary injunction against Defendant.<sup>3</sup>

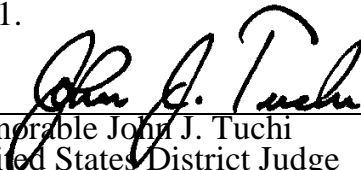
3 **III. PRELIMINARY INJUNCTION**

4 For the foregoing reasons,

5 **IT IS ORDERED** granting Plaintiff United States of America's Motion for  
6 Preliminary Injunction (Doc. 37).

7 **IT IS FURTHER ORDERED** that, until the Court rules on the merits of this  
8 lawsuit, Defendant Gear Box Z, Inc., and all persons acting for or on its behalf, are hereby  
9 enjoined from (1) selling, offering for sale, or transferring any products or components  
10 listed in Attachment A to this Order, or any materially similar products; and (2) selling,  
11 offering for sale, or transferring any intellectual property associated with the products listed  
12 in Attachment A to this Order, or any materially similar products.

13 Dated this 17th day of March, 2021.

14   
15 Honorable John J. Tuchi  
16 United States District Judge  
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28 <sup>3</sup> Under Federal Rule of Civil Procedure 65(c), the United States is not required to give security for the issuance of a preliminary injunction.

## ATTACHMENT A-GEAR BOX Z DEFEAT DEVICE PRODUCT LIST

Name	Vehicle Make Application	GBZ Part Number	Type of Defeat Device
DPF-R Ford EGR Block Plates	Ford	GBZ-FBP	Software
Ford 4.0 Programmer	Ford	GBZ-FD40	Software
Ford 4.0 Plus Programmer	Ford	GBZ-FED40	Software
Electron - Ford 2008-2010 6.4L Power Stroke	Ford	GBZ-EM1.0	Software
Electron - Ford 2011-2017 6.7L Power Stroke	Ford	GBZ-EM1.0	Software
Ford Electron Add-Ons (including Plus Tune, Tachyon Tune, and Maintenance Mode)	Ford	GBZ-EM1.0	Software
GBZ - E41 Maintenance Mode & Economy Tune 2011-2016	Ford	Unknown	Software
GBZ - 41 Maintenance Mode 2011-2016 6.7L	Ford	Unknown	Software
Dodge 3.0	Dodge	GBZ-DD30	Software
Dodge Electron Add-Ons (including Plus Tune, Tachyon Tune, and Maintenance Mode)	GM	GBZ-EM1.0	Software
Duramax 4.0 Programmer	GM	GBZ-GMD40	Software
Duramax 4.0 Plus Programmer	GM	GBZ-GMED40	Software

## ATTACHMENT A-GEAR BOX Z DEFEAT DEVICE PRODUCT LIST

Electron - GM 2007.5-2010 LMM Duramax	GM	GBZ-EM1.0	Software
Electron - GM 2011-2017 LML Duramax	GM	GBZ-EM1.0	Software
AFE 4" Down-Pipe Back CAT/DPF Delete Race Exhaust for Ford Trucks	Ford	AFEFP4F	Hardware
AFE CAT/DPF Delete Race Exhaust for Ford Trucks	Ford	AFEFP2	Hardware
AFE DPF Delete Race Exhaust for Ford Trucks	Ford	AFEFP	Hardware
Race Exhaust for Ford Trucks	Ford	Unknown	Hardware
CAT/DPF Delete Race Exhaust	Ford	Unknown	Hardware
4" Down-Pipe Back Cat/DPF Delete Race Exhaust	Ford	Unknown	Hardware
11-16 6.7L Diesel MBRP/P1 Installer Series Competition Race Pipe	Ford	Unknown	Hardware
AFE 4" Down-Pipe Back CAT/DPF Delete Race Exhaust for GM Trucks	GM	AFEGMP4F	Hardware
AFE DPF Delete Race Exhaust for GM Trucks Crew Cab Long Box	GM	AFEGMP- CCLB	Hardware
AFE DPF Delete Race Exhaust for GM Trucks Crew Cab Short Bed	GM	AFEGMP- CCSB	Hardware
AFE DPF Delete Race Exhaust for GM Trucks Extended Cab Short Box	GM	AFEGMP- ECSB	Hardware

## ATTACHMENT A-GEAR BOX Z DEFEAT DEVICE PRODUCT LIST

1	DPF Delete Race Exhaust for Extended Cab Long Box	GM	Unknown	Hardware
2				
3	DPF Delete Race Exhaust-Crew Cab long Box	GM	Unknown	Hardware
4				
5	DPF Delete Race Exhaust for Extended Cab Short Box	GM	Unknown	Hardware
6				
7	DPF Delete Race Exhaust-Crew Cab Short Box	GM	Unknown	Hardware
8				
9	4" Down-Pipe Back Cat/DPF Delete Race Exhaust	GM	Unknown	Hardware
10				
11	DPF Emulator	Dodge	GBZ-DD30	Hardware
12				
13	EGT Emulator	Dodge	Unknown	Hardware
14				
15	AFE 4" Turbo Back DPF Delete Race Exhaust for Dodge Trucks	Dodge	AFEDP4F	Hardware
16				
17	AFE CAB & Chassis DPF Delete Race Exhaust for Dodge Trucks	Dodge	AFEDPCC	Hardware
18				
19	AFE CAT/DPF Delete Race Exhaust for Dodge Trucks	Dodge	AFEDP2	Hardware
20				
21	AFE DPF Delete Race Exhaust for Dodge Trucks	Dodge	AFEDP	Hardware
22				
23	DPF Delete Race Exhaust	Dodge	Unknown	Hardware
24				
25	CAT/DPF Delete Race Exhaust	Dodge	Unknown	Hardware
26				

## ATTACHMENT A-GEAR BOX Z DEFEAT DEVICE PRODUCT LIST

Cab & Chassis DPF Delete Race Exhaust	Dodge	Unknown	Hardware
4" Full DPF Delete Race Exhaust	Dodge	Unknown	Hardware